Stinger Missile System Block I Upgrade

Description

Stinger Missile platforms provide defense against low altitude fixed and rotary wing aircraft. The Stinger Missile is a heat seeking air defense guided missile capable of man-portable shoulder launch or vehicle launch. It employs a unique image scanning technique that allows it to discriminate among targets, flares, and background clutter. The Stinger Missile also possesses the Target Adaptive Guidance technique that biases missile orientation toward vulnerable portions of the aircraft and assures maximized lethality. This superior lethality is derived from hit-to-kill accuracy, high warhead lethality, and the impact force of the Stinger Missile's kinetic energy generated by speeds of up to Mach 2.0. The fire-and-forget technology allows gunners and platforms to take cover or engage new targets immediately after firing. The Stinger Missile is issued as a certified round of ammunition, so it requires no field maintenance or associated logistical costs. The upgrade consists of a new generation Reprogrammable Micro Processor (RMP), software enhancement and a roll frequency sensor.

Operational Impact

The capabilities of the existing stockpile of RMP needs to be increased to meet these threats by modernization through technology insertion. The upgrade (to the Block I configuration) will eliminate several shortcomings of the RMP missile that include capabilities against low-aspect angle targets, reactive infrared countermeasures, night engagements, and engaging targets in clutter. This upgrade has increased the acquisition range of the missile (out beyond 10 kilometers) and has proven to be more effective against UAVs and low radar cross-section targets.

Program Status

Stinger Missile Block I upgrades will continue through FY02 and will be completed in FY06.

Procurement Profile FY02 FY03 Quantity: 150 343

Developer/Manufacturer Raytheon Missile Systems Corporation

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